# How *ais* Shear Pins rewrite the metal strike operating procedure for material processing

**Material processing carries the risk of hitting contaminated feedstock. This can ultimately cause significant damage to the machine and lead to substantial costs stemming from emergency repairs, unscheduled downtime, delays to projects and more.**

To mitigate the ever-present risk, many manufacturers provide a protection system, such as metal detection. While these systems are incredibly helpful, they are not 100% effective. Metal strikes and other un-processable objects are still leading to cracked/failed shear pins and further damage.

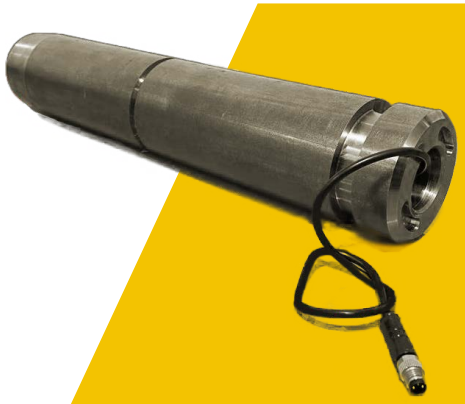
These examples illustrate the realities of processing contaminated feedstock, and the difference *ais* can make.

ANSTEE INDICATION SYSTEMS

## Example textbook scenarios without *ais* system

| | | |
|---|---|---|
| Metal detection shuts machine down following a metal strike | Operator checks all pins and replaces any that have cracked/failed | Processing continues |
| Machine protection system reduces the impact of an un-processable object | Operator checks all pins and replaces any that have cracked/failed | Processing continues |
| Operator hears metal impact | Operator checks all pins and replaces any that have cracked/failed | Processing continues |

## The *ais* Shear Pin provides remote alerts as soon as the Shear Pin cracks or fails.



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## Actual scenarios without *ais* system

| Metal strike occurs | Operator diligently checks all pins. On this occasion no crack/failure has occurred | Processing continues | While essential, the precautionary pin check has reduced machine productivity and revenue. Frequent checks like this can also damage client relations by causing a seemingly unnecessary delay |
|---|---|---|---|
| Metal strike occurs | Operator diligently checks all pins but does not identify the cracked/failed pin | Processing continues | The unidentified failed pin inevitably leads to costly and disruptive machine downtime |
| Metal strike occurs | Operator chooses to take a chance and skip a precautionary pin inspection. Unknown to the operator, a pin has cracked/failed | Processing continues | The failed pin inevitably leads to costly and disruptive machine downtime |

## Metal strike scenarios with *ais* system

| Metal strike occurs | No alert | Processing continues | The ***ais*** system has avoided a costly precautionary pin inspection |
|---|---|---|---|
| Metal strike occurs | ***ais*** system alerts and indicates which pin has cracked/failed | Operator replaces pin and processing continues | The ***ais*** system has avoided a costly precautionary pin inspection and damage to the machine |
| Pin suddenly fails | ***ais*** system alerts and indicates which pin has cracked/failed | Operator replaces pin and processing continues | The ***ais*** system has avoided a costly precautionary pin inspection and damage to the machine |

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**“*ais* acts as a final line of defence in the event of a metal strike or un-processable object, providing maximum protection for the machine.**

***ais* also reduces operator risk exposure and fatigue.”**